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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,711	09/19/2003	Han Ting Chang	J7172(V)	6002
201	7590	11/25/2005	EXAMINER	
UNILEVER INTELLECTUAL PROPERTY GROUP 700 SYLVAN AVENUE, BLDG C2 SOUTH ENGLEWOOD CLIFFS, NJ 07632-3100			GEMBEH, SHIRLEY V	
			ART UNIT	PAPER NUMBER
			1614	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/665,711	<b>Applicant(s)</b> CHANG ET AL.	
	<b>Examiner</b> Shirley V. Gembeh	<b>Art Unit</b> 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

Status of claims: Claims 1-6 have been amended.

1. claims 1-6 are pending.
2. claims 1-6 are rejected.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on March 15, 2004 and April 23, 2004 have been considered.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

I. Claims 1-6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 6 of U.S. Patent Application No. 10/665710. Although the conflicting claims are not identical, they are not patentably distinct from each other. The reasons are as follows:

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- Both sets of claims refer to an oral composition comprising a polymer obtainable by co-polymerization of co-monomers.
- Both applications recite using the same compositions and/or derivatives thereof. See current application claims 1 - 6 and copending application claims 1 – 6. The instant claims differ with respect to the limitation amount recited in claim 1 with the limitation of copending application claim, where the range of the polymer is at least 40 mol% of the mixture instead of from 5-95 mol%. In addition the instant claims differ in formula (I) where in the copending application the variable of R is present, but is still embraced by the divalent organic linking group L, of the claimed subject matter. The substituent X would have been already used in the copending application because the end products would have resulted in obvious variation of the claimed subject matter.
- In view of the foregoing, the copending application claims and the current application claims are obvious variations.

II. Claims 1-6 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 4 of U.S. Patent Application No. 10/666489. Although the conflicting claims are not identical, they are not patentably distinct from each other. The reasons are as follows:

- Both sets of claims refer to an oral composition comprising a polymer obtainable by co-polymerization of co-monomers. The instant application claims needs from about 5-95 mol% of co-monomer.
- Both applications recite using the same compositions and/or derivatives thereof. See current application claims 1 - 6 and copending application claims 1 – 4. The compositions recited in the claims are an obvious variation of each other.

In view of the foregoing, the copending application claims and the current application claims are obvious variations.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

III. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Mirajkar et al., US 5,800,803 ('803).

These claims are defined as a product-by-process claims and is a product, not a process, see In re Bridgeford, 357 F2d 679, 149, USPQ 5 (CCPA 1966). It is the patentability of the product claimed and not of the recited process steps which must be established, see In re Brown, 459 F2d 531, 173 USPQ 685 (CCPA 1972); In re Wertheim, 541 F2d, 191 USPQ (CCPA 1976). A comparison of the recited process with the prior art processes does not serve to resolve the issue concerning the patentability of the product, see In re Fessman, 489 F2d 742, 180 USPQ 324 (CCPA 1974). Mirajkar et al., disclose an oral composition product at (col. 2 line 24-39).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

IV. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mirajkar et al., US 5,800,803 ('803) taken with Wilkerson, III et al., US 5,478,881.

'803 teaches current claim 1: an oral dentifrice composition a pasty dentifrice (col. 5 line 17) from 5 to 95 mole% of the mixture is taught at (col. 1 line 64) as 40 % (same as 40 mol% is within instant claim limitation) of (having a formula  $H_2C=C(R)-(X)_n-Y$ ), where the mixtures of the copolymers is anionic is taught at (col. 3 line 25).

With regards to claim 3, the anionic co-monomer is styrene taught (at col.3 line 19).

'803 did not explicitly teach the same combination in the instant claims 2, 4 and 5, however, the reference teaches useful alpha.beta monomers used to prepare the copolymers (see col. 3 lines 1-24). It is obvious that one of ordinary skill in the art would use the polymers of the current claimed subject matter because close structural similarity of the reference compound suggest the claimed subject matter, one of

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ordinary skill in the art would expect the polymers to have similar properties. The reference also teaches the instant claim 6 the process for preparing an oral care, in alcohol/water diluents, polymerizing the liquid by heating it under inert gas, in the presence of an initiator (see col. 4 lines 51+), and blending the mixture with oral care actives (as cited at col. 5 lines 1-65).

Wilkerson, III et al., is directed to an aqueous solution, comprising a polymer with a mole percent (mol%) 30-99 % having the formula  $H_2C=C(R)-(X)_n-Y$ , (see col. 6 lines 13-67). It would have been obvious to one of ordinary skill in the art to use any monomer with the same functionality and expect a successful result in doing so.

Even though Mirajkar et al., did not teach the identical monomers in claims 4 and 5, however, it would have been obvious to combine the teachings of the above cited prior art and to change the polymers used in the cited prior art with that the claimed subject matter because the Mirajkar et al., reference teaches a preferred anionic copolymer, (see col. 3 line 38-67), thereby making it an obvious variation of polymers of that category to be used depending on the end use, flow rate and viscosity.

One having ordinary skill in the art would have been motivated to combine the teachings of Mirajkar et al., with that of Wilkerson, III et. al., specifically by switching the polymers used by Mirajkar et al. and Wilkerson, III et. al., to that of the claimed subject matter and expect a successful result in doing so because: polymers are well known in the art as a means of delivering the active agent to the surface of the tooth or the oral cavity for a more efficacious effect. In particular, the active agents in the polymeric

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composition adhere to the surface, thus facilitating greater contact time between the active agent and the dental tissue. See Mirajkar et al., col. 1 line 45-56.

Therefore, the claimed subject matter was prima facie obvious to make and use at the time it was made.

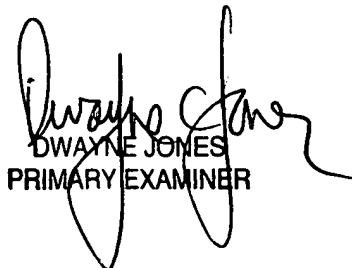
No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley V. Gembah whose telephone number is 571-272-8504. The examiner can normally be reached on 8:30 -5:00, Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DWAYNE JONES  
PRIMARY EXAMINER